#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 07/06/99 Date Received: 06/17/99

Project: Metro Self Monitor, PO# M62136

Date Samples Extracted: 07/01/99 Date Extracts Analyzed: 07/02/99

### RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, ZINC USING METHOD 6010

### Samples Processed Using Method 3005A

Results Reported as mg/L (ppm)

Sample ID	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M62136	0.51	0.74	0.65	< 0.05
Method Blank	< 0.05	< 0.05	< 0.05	< 0.05

#### **ENVIRONMENTAL CHEMISTS**

Date of Report: 07/06/99 Date Received: 06/17/99

Project: Metro Self Monitor, PO# M62136

### QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 906114-01 (Duplicate)

				Relative	
맛을 하하면 얼굴한 얼굴없다.	Reporting	Sample	Duplicate	Percent	Acceptance
Analyte	Units	Result	Result	Difference	Criteria
Chromium	mg/L (ppm)	0.21	0.17	21a	0-20
Copper	mg/L (ppm)	0.20	0.16	22a	0-20
Nickel	mg/L (ppm)	0.15	0.13	14	0-20
Zinc	mg/L (ppm)	0.09	0.06	40a	0-20

Laboratory Code: 906114-01 (Matrix Spike)

		Reporting	Spike	Sample	% Recov	ery	% Recov	ery	Acceptance		
	Analyte	Units	Level	Result	MS	1	MSD	1	Criteria	RPD	
٠Ţ	Chromium	mg/L (ppm)	5	0.21	97	5. j	86		80-120	12	
	Copper	mg/L (ppm)	5	0.20	96		82		80-120	16	
	Nickel	mg/L (ppm)	10	0.15	99		93		80-120	6	
	Zinc	mg/L (ppm)	5	0.09	99		99		80-120	0	

Laboratory Code: Laboratory Control Sample

	Reporting	Spike	% Recover	ry % Recove	ry Acceptance	
Analyte	Units	Level	LCS	LCSD	Criteria	RPD
Chromium	mg/L (ppm)	5	100	100	80-120	0
Copper	mg/L (ppm)	5	102	103	80-120	1
Nickel	mg/L (ppm)	10	98	103	80-120	5
Zinc	mg/L (ppm)	5	98	103	80-120	5

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

a - The analyte was detected at a level less than five times the detection limit. The RPD results may not provide reliable information on the variability of the analysis.

#### **ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

July 6, 1999

#### **DUPLICATE COPY**

#### **INVOICE #99ACU0706-2**

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M62136: Results of testing requested by Gerry Thompson for material submitted on June 17, 1999.

1 water sample analyzed for Chromium, Copper, Nickel, and Zinc using Method 6010 @ \$80 per sample

80.00

Amount Due \$ 80.00

FEDERAL TAX ID (b) (6)

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282

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# SAMPLE CHAIN OF CUSTODY

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#### **ENVIRONMENTAL CHEMISTS**

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July 6, 1999

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on June 17, 1999 from your Metro Self Monitor, PO# M62136 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Manuel Marti Project Manager

Enclosures ACU0706R.DOC